

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/6/2010 has been entered.

### ***Terminal Disclaimer***

Please note that the terminal disclaimer filed 10/6/2010 was not approved by the office. The reason for this is because:

The language 35 USC 154 to 156 is unacceptable because it has been determined that the language (155 and 156) makes the TD indefinite, as those statutes do not cover the same rights. It should read 35 USC 154 and 173.

Please use the forms at the end of Chapter 1400 of the MPEP or the form paragraphs in 1490, or language that is clear and complies with the TD rule.

The information as shown above was retrieved from the "Terminal Disclaimer review decision" dated 10/29/2010. Although this document is not mailed out, the applicant may view the document in the public pair system of this application on the USPTO's website to see the exact reasons why the most recently filed terminal disclaimer was disapproved by the office.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 30-32 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. That is, the claims are directed to an “animation”, which is a data structure, per se. The animation itself is simply pure data or structured data. The data structures of the animation are rejected under 35 USC 101 for similar reasons as computer programs (that comprises only code) in that the computer programs are also data structures per se. Data structures are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. Claim 30 refers to the phrase “computer-implemented” in the pre-amble, however this statement does not make the claim statutory. The claim is still overall directed towards claiming a pure data structure. The claims overall make it clear that the animation itself is being claimed not a computer. Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. Computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical “things.” They are neither computer components nor statutory processes, as they are not “acts” being performed.

#### ***Double Patenting with an Issued Patent***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined

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application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 22-25, 29-32, and 36-43 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 11, and 14, of US Patent No 6,654,018.

Although the conflicting claims are not identical, they are not patentably distinct from each other because:

The claim correspondence between the inventions is shown below:

Instant Invent	Claim 22	23	24	25	29	30	31	32	
6,654,018	Claims 1, 11	1, 11	1	1	14	1,11	1	1	

Instant Invent	Claim 36	37	38	39	40	41	42	43	
6,654,018	Claims 1, 11	1, 11	1	1	14	1,11	1	1	

As per claim 22 in the instant invention, the following is one example of how the claims correspond to one another in each invention:

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Instant Invention, Claim 1	6,654,018, Claims 1 and 11
A computer-implemented method for a synthesis of photo- realistic animation of an object, the method comprising:	A method for the synthesis of photo-realistic animation of an object using a unit selection process, comprising the steps of:
creating a first database of image samples showing the object in a plurality of appearances;	a) creating a first database of image samples showing an object in a plurality of appearances;
creating a second database of the visual features for each image sample of the object;	b) creating a second database of visual features for each image sample of the object;
creating a third database of the non-visual features of the object in each image sample;	c) creating a third database of non -visual characteristics of the object in each image sample;
Obtaining, for each frame in a plurality of N frames of an object animation, a target feature vector comprising visual features and non-visual features associated with the object animation;	d) obtaining for each frame in a plurality of N frames of an animation, a target feature vector comprised of the visual features and the non -visual characteristics;
	e) for each frame in the plurality of N frames of the animation, selecting candidate image samples from the first database using a comparison of a combination of visual features from the second database and non -visual characteristics from the third databases with the target feature vector;

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selecting via a processor candidate image samples from the first database utilizing the target feature vector to generate the photo-realistic animation of the object;	a) selecting, for each frame, a number of candidates image samples from the first database based on the target feature vector;
calculating, for each pair of candidates of two consecutive frames, a concatenation cost from a combination of visual features from the second database and object characteristics from the third database; and	b) calculating, for each pair of candidates of two consecutive frames, a concatenation cost from a combination of visual features from the second database and object characteristics from the third database;
performing a Viterbi search to find a least expensive path through the candidates accumulating a target cost and concatenation costs	c) performing a Viterbi search to find the least expensive path through the candidates accumulating a target cost and concatenation costs
wherein generating the photo-realistic animation of the object occurs using an audio/video unit selection process in which a longest possible candidate image sample is selected	and f) compiling the selected candidates to form a photo-realistic animation

One difference between the instant application and the patent is that the instant application claim 22 includes: “using an audio/video unit selection process in which a longest possible candidate image sample is selected”. However, it would have been obvious to one of ordinary skill in the art to claim the claimed subject matter in view of the patented claim because the patented claim is already forming a database with concatenation costs calculated between pairs of candidates. One of ordinary skill in the art would recognize that a longer candidate image sample gives better results than many smaller, shorter candidate images samples concatenated together. When these concatenation costs are already provided in the patented claim, it would have been obvious

to one of ordinary skill in the art to search the pairs of candidates for the longest possible candidate image samples.

As per claim 23 in the instant invention, this claim is obvious in view of copending invention both claims 1 and 11 for the same reasons as explained above in regards to claim 22 in the instant invention.

As per claims 24 and 25 in the instant invention, these claims are obvious in view of copending invention claims 1, for the same reasons as explained above in regards to claim 22 in the instant invention.

As per claim 29 in the instant invention, this claim is obvious in view of copending invention claim 14 for the same reasons as explained above in regards to claim 22 in the instant invention.

As per claim 30 in the instant invention, this claim is obvious in view of copending invention both claims 1 and 11 for the same reasons as explained above in regards to claim 22 in the instant invention.

As per claims 31, 32, and 36-43 in the instant invention, these claims are obvious in view of copending invention claims 1, 11, and 14, for the same reasons as explained above in regards to claim 22 in the instant invention.

***Response to Arguments***

1. Applicant's arguments filed 10/6/2010 have been fully considered but they are not persuasive.

Applicant argues that the application is now allowable because a terminal disclaimer has overcome the double patenting rejections (middle of page 10 in filed response).

The examiner maintains that the double patenting-based rejections still stand because the terminal disclaimer, as filed, was disapproved by the office. Applicant is advised to look carefully review the "Terminal Disclaimer review decision" dated 10/29/2010 in public pair system of this application to see the exact reasons why the most recently filed terminal disclaimer was disapproved by the office. Both the double patenting rejection and 35 USC 101 rejections must be addressed and overcome before the present application can move to allowance.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL F. HAJNIK whose telephone number is (571)272-7642. The examiner can normally be reached on Mon-Fri (8:30A-5:00P).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ulka Chauhan can be reached on (571) 272-7782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Daniel F Hajnik/  
Primary Examiner, Art Unit 2628